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TRANSMITTAL FORM

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Total Number of Pages in This Submission

Application Number

10/655,699

Filing Date

December 5, 2003

First Named Inventor

Derderian et al.

Art Unit

2812

Examiner Name

Unknown

Attorney Docket Number

MI22-2307

ENCLOSURES (Check all that apply)

- ☐ Fee Transmittal Form
- ☐ Fee Attached
- ☐ Amendment/Reply
- ☐ After Final
- ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☒ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Response to Missing Parts/Incomplete Application
- ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53

- ☐ Drawing(s)
- ☐ Licensing-related Papers
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- ☐ After Allowance Communication to a Technology Center (TC)
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
- ☐ Proprietary Information
- ☐ Status Letter
- ☒ Other Enclosure(s) (please identify below):
Return Receipt Postcard; Form PTO-1449; Cited References

Remarks

EV372470695

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or
Individual

Mark S. Matkin, Reg. No. 32,268
Wells St. John, P.S.

Signature

Date

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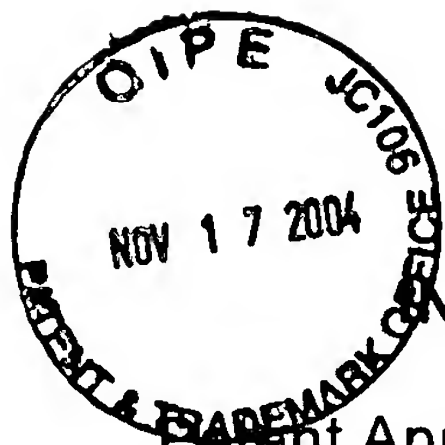
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application Serial No.10/655,699
Filing Date September 5, 2003
Inventorship Garo J. Derderian et al.
Assignee Micron Technology, Inc.
Group Art Unit 2812
Examiner Unknown
Attorney's Docket No. MI22-2307
Title: Methods of Depositing a Silicon Dioxide Comprising Layer in the
Fabrication of Integrated Circuitry, Methods of Forming Trench Isolation in
the Fabrication of Integrated Circuitry

EV372470695

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

References - See Attached Form PTO-1449


In compliance with 37 C.F.R. §§ 1.56, 1.97 and 1.98, your attention is directed to the United States patents and other references listed on the attached Form PTO-1449. Copies of the cited art are attached hereto. No admission is made regarding whether all the submitted references are prior art.

This Supplemental Information Disclosure Statement is being filed within three months of the filing date of the application or before the mailing of a first Office Action on the merits, whichever occurs last. Therefore, no fee is believed to be required. However, in the event that a fee is required for filing this Supplemental Information Disclosure Statement, please charge the fee specified under 37 C.F.R. § 1.17(p) to Deposit Account No. 23-0925.

Respectfully submitted,

Dated: 11-17-04

By: 
Mark S. Matkin
Reg. No. 32,268

Form PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY DOCKET NO. MI22-2307	SERIAL NO. 10/655,699
 <p>LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)</p>		APPLICANT: Garo Derderian et al.	
		FILING DATE September 5, 2003	GROUP ART UNIT 2812

U.S. PATENT DOCUMENTS							
*Examiner's Initials		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	3,990,927	11/1976	Montier			
	AB	4,474,975	10/1984	Clemons et al.			
	AC	5,156,881	10/1992	Okano et al.			
	AD	5,182,221	01/1993	Sato			
	AE	5,410,176	04/1995	Liou et al.			
	AF	5,470,798	11/1995	Ouellet			
	AG	5,719,085	02/1998	Moon et al.			
	AH	5,741,740	04/1998	Jang et al.			
	AI	5,776,557	07/1998	Okano et al.			

FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation
							Yes No
	AJ	02277253A	11/1990	Japan (Hayashide et al.)			
	AK	146224	01/1996	Japan			
	AL	06-334031	12/1994	Japan			Abstract

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)			
	AM		Beekmann et al., <i>Sub-micron Gap Fill and In-Situ Planarisation using Flowfill™ Technology</i> , Electrotech 1-7
			ULSI Conference, Portland, OR (October 1995).
	AN		Horie et al., <i>Kinetics and Mechanism of the Reactions of O(³P) with SiH₄, CH₃SiH₃, (CH₃)₂SiH₂, and (CH₃)₃SiH</i> , 95 J. PHYS. CHEM 4393-4400 (1991).
	AO		Joshi et al., <i>Plasma Deposited Organosilicon Hydride Network Polymers as Versatile Resists for Entirely Dry Mid-Deep UV Photolithography</i> , 1925 SPIE 709-720 (January 1993).
EXAMINER		DATE CONSIDERED	
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>			

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)	ATTY. DOCKET NO. MI22-2307	SERIAL NO. 10/655,699
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U.S. PATENT DOCUMENTS							
*Examiner's Initials		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	5,786,039	07/1998	Brouquet			
	AB	5,801,083	09/1998	Yu et al.			
	AC	5,863,827	01/1999	Joyner			
	AD	5,883,006	03/1999	Iba			
	AE	5,888,880	03/1999	Gardner et al.			
	AF	5,895,253	04/1999	Akram			
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		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AJ	05-315441	11/1993	Japan			Abstract	

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)			
	AM		Kiermasz et al., <i>Planarisation for Sub-Micron Devices Utilising a New Chemistry</i> , Electrotech 1-2, DUMIC
			Conference, California (February 1995).
	AN		Kojima et al., <i>Planarization Process Using a Multi-Coating of Spin-on-Glass</i> , V-MIC Conference, pp. 390-396
			(June 13-14, 1988).
	AO		Matsuura et al., <i>A Highly Reliable Self-planarizing Low-k Intermetal Dielectric for Sub-quarter Micron</i>
			<i>Interconnects</i> , 97 IEEE 785-788 (July 1997).
EXAMINER		DATE CONSIDERED	
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U.S. PATENT DOCUMENTS							
*Examiner's Initials		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	5,950,094	09/1999	Lin et al.			
	AB	5,960,299	09/1999	Yew et al.			
	AC	5,972,773	10/1999	Liu et al.			
	AD	5,998,280	12/1999	Bergemont et al.			
	AE	6,030,881	02/2000	Papasouliotis et al.			
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	AG	6,156,674	12/2000	Li et al.			
	AH	6,719,012	4/2004	Doan et al.			
	AI	6,583,028	6/2003	Doan et al.			
	AJ	5,570,469	6/1998	Uram et al.			
	AK						

FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation
							Yes No
	AL						

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)			
	AM		Matsuura et al., <i>Novel Self-planarizing CVD Oxide for Interlayer Dielectric Applications</i> ; 1994; 94 IEEE 117-120.
	AN		McClatchie et al. <i>Low Dielectric Constant Flowfill™ Technology for IMD Applications</i> , 7 pages (pre-August 1999).
	AO		Withnall et al., <i>Matrix Reactions of Methylsilanes and Oxygen Atoms</i> , 92 J. PHYS. CHEM. 594-602 (1988).
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	AA	5,105,253	04/1992	Pollock	357	49	
	AB	5,604,149	02/1997	Paoli et al.	437	67	
	AC	5,616,513	04/1997	Shepard	438	402	
	AD	5,786,263	07/1998	Perera	438	431	
	AE	5,895,255	04/1999	Tsuchiaki	438	427	
	AF	5,923,073	07/1999	Aoki et al.	257	501	
	AG	5,981,354	11/1999	Spikes et al.	438	424	
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	AI	6,033,961	03/2000	Xu et al.	438	295	

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		Document Number	Date	Country	Class	Subclass	Translation
							Yes No
	AL			5,105,253	695		

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	AM		Curtis et al, "APCVD TEOS: O3 Advanced Trench Isolation Applications", Semiconductor Fabtech, 9 th Ed.,
			p. 241 - 247
	AN		George, S.M. et al., "Atomic layer controlled deposition of SiO ₂ and Al ₂ O ₃ using ABAB... binary reaction
			sequence chemistry", Applied Surface Science 82/83, Elsevier Science B.V., July 10, 1994, p. 460-467.
	AO		Morishita et al. "Atomic-layer chemical-vapor-deposition of silicon-nitride", Applied Surface Science 112,
			Elsevier Science B.V., 1997, p. 198-204.
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U.S. PATENT DOCUMENTS							
*Examiner's Initials		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	6,090,675	07/2000	Lee et al.	438	301	
	AB	6,171,962	01/2001	Karlsson et al.	438	692	
	AC	6,187,651	02/2001	Oh	438	435	
	AD	6,191,002	02/2001	Koyanagi	438	431	
	AE	6,326,282	12/2001	Park et al.	438	424	
	AF	6,329,266	11/2001	Hwang et al.	438	424	
	AG	6,355,966	03/2002	Trivedi	257	499	
	AH	6,583,060	06/2003	Trivedi	438	700	
	AI	10/806,923		Li et al.			03/22/2004

FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation
							Yes No
	AJ						

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)			
	AK		Yokoyama et al. "Atomic layer controlled deposition of silicon nitride and in situ growth observation by infrared reflection absorption spectroscopy", Applied Surface Science 112, Elsevier Science B.V., 1997, p. 75-81.
	AL		Gasser et al., "Quasi-monolayer deposition of silicon dioxide", Elsevier Science S.A., 1994, p. 213-218.
	AM		Shareef et al., "Subatmospheric chemical vapor deposition ozone/TEOS process for SiO ₂ trench filling", J. Vac. Sci. Technol. B 13(4), Jul/Aug 1995, p. 1888-1892.
	AN		
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*Examiner's Initials		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	6,448,150	09/2002	Tsai et al.	438	427	
	AB	6,617,251	09/2003	Kamath et al.	438	691	
	AC	2001/0006255 A1	07/2001	Kwon et al.	257	751	
	AD	2001/0006839 A1	07/2001	Yeo	438	435	
	AE	2001/0046753 A1	11/2001	Gonzalez et al.	438	424	
	AF	2002/0004284 A1	01/2002	Chen	438	427	
	AG	2004/0082181	04/2004	Doan et al.			
	AH	10/931,524		Sandhu			08/31/2004

FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AI							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)			
	AJ		Disclosed Anonymous 32246, "Substrate Contact with Closed Bottom Trenches", Research Disclosure, Feb. 1991, 1 page.
	AK		
	AL		
	AM		
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